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Soggetti	Database design SQL (Computer program language)
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Nota di contenuto	Cover; Copyright; Dedication; Acknowledgments; Contents At A Glance; Contents; Introduction; Intended Audience; Companion Website; Instructors; Students; Contributors; Chapter 1: Database Concepts; Chapter Objectives; Introduction to Database and Database Management System; Relational Database Model; The DB2 Database; Database Terminology; The Importance of Database Design; Database Development Process; Database Planning; Requirements Analysis; Database Design; DBMS Selection; Database Implementation; Testing and Evaluation; Database Maintenance; Operation; End-of-Chapter; Chapter Summary Key Terms Chapter 2: Conceptual Design Using ER Diagrams; Introduction to Database Design; Developing Entity Relationship Diagrams; ERD Case Study; Step 1: Identify Entities; Step 2: Identify Attributes; Step 3: Identify Unique Identifier (UID); Step 4: Determine Relationships; Step 5: Determine Optionality and Cardinality; Step 6: Eliminate Many-to-Many Relationships; Step 7: Named Relationships; Step 8: Determine Data Types; Recursive Relationship; Entity Subtypes; End-of-Chapter; Chapter Summary; Key Terms; Chapter 3: Normalization; Normalization; Normal Forms; Representing Database Tables Functional Dependency First Normal Form (1NF); Second Normal Form (2NF); Third Normal Form (3NF); Boyce-Codd Normal Form (BCNF); Fourth Normal Form (4NF); Practical Example; First Normal Form (1NF); Second Normal Form (2NF); Third Normal Form (3NF); End-of-Chapter;

Chapter Summary; Key Terms; Chapter 4: Physical Database Design: Creating Tables; Physical Database Design; Transforming Conceptual Design To Physical Design; Primary, Candidate, and Foreign Keys; Specify View Implementation; Specify Security Implementation; Specifying Additional Indexes for Performance; Hierarchy of Data; Variables
Database, Tables, Rows, and Columns Internal Binary Representation of Data; Data Types; Character Data Type; Numeric Data Types; Simulating a Boolean Data Type; Date Format; Timestamp Fields; Sample Data from a Table; Introduction to SQL; Running SQL Commands; Editor Pane; SQL Results Pane; Creating a Schema; Changing the Default Schema; Creating a Table; CREATE TABLE Command; Verify Syntax of SQL Script; Run SQL Script; Constraints; Qualified Names; Comments; NULL Values; Default Values; VARCHAR Data Type; ALTER Table Command; DROP (Delete) Table Command; Saving SQL Scripts; Edit SQL Scripts
Adding Data to a Table The INSERT Command; Displaying Data in a Table; Display Table Description Information; Rename a Database Object; End-of-Chapter; Chapter Summary; Key Terms; Chapter 5: Database Constraints; Introduction to Constraints; Data Integrity; Entity Integrity; Referential Integrity; Constraint Types; Primary Key Constraints; Unique Constraints; Foreign Key Constraints; Defining Foreign Key Constraints; Foreign Key Actions; Additional Foreign Key Constraint Considerations; Avoid Foreign Key Constraints for Read-Only Tables; Check Constraints; Check Constraint Guidelines
Defining Check Constraints

Sommario/riassunto

Thorough and updated coverage of database design and SQL for DB2 are the focus of this guide for the relational database-management system used on IBM i computer systems. Suitable for classroom instruction or self-study, this book explains the most widely used database language and the way that language is implemented on a variety of computer platforms. Topics covered include database concepts, SQL inquiries, web applications, and database security, and the material is reinforced by numerous illustrations, examples, and exercises.